UNITED STATES DEPARTMENT OF AGRICULTURE

# FOREST SERVICE

REPORT

OF

UINTA FOREST INSECT CONTROL SURVEY

1935

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Insect Control, Uinta
Forest Control Survey,
1935

MEMORANDUM FOR REGIONAL FORESTER:-

Submitted herewith is the report for our 1935 Soapstone, Wolf Creek, Nobletts and Tabby Mountain insect control survey. Under separate cover we are sending maps to augment the written report. Most of the information desired is given in tabulated form to make the report more clear and to save time. The limber pine and lodgepole pine areas are treated together, as they are inter-mixed and the limber pine is nearly all killed by earlier insect attacks.

Method Used in Survey

Mr. Evenden's instructions in the method of conducting extensive surveys of Mountain Pine beetle infestations for 1934 were followed through, except that his printed form tally sheets were not available. During the past two years of insect control surveys, a rough map has been made showing the approximate limits of lodgepole and limber pine types, which could be considered as potential beetle hosts. Each night strips were plotted for the following day on this map, in order to get the best practicable sample of the larger infested areas and to take in all the smaller isolated groups. These strips were followed in almost every case, only being changed when it became necessary to offset to keep within the type and to get the extent of the type line for the purpose of constructing a new type map. Each unit was computed separately.

The maps show the location of all areas of potential beetle timber, strips run, location, number and character of all new attacks encountered on our strip lines, and the location of areas in which we recommend treatment.

General Summary

Of the 9 units cruised in the Uinta Forest, none show an increase in infestation. The general infestation over the whole of the lodgepole pine areas in the Uinta Forest shows a decrease of 383 in new attacks, from 1,535 in 1934, to 1,152 in 1935. or 25% decrease.

The percent of cruise varied in each unit. In isolated areas where we were not familiar with the type lines or where heavy infestation was expected, the percent of cruise was increased, and likewise, where attacks were expected to be low, the percent of cruise was kept low. The percent of cruise varied from 6.1% in Rhodes Canyon to 14.6% in Upper Soapstone Creek. The general average over the entire area was 8.6%, which is very much higher than the 1¼% required in Mr. Evenden's instructions. The reason for this much higher percent cruise was for making a type map and a cruise of all the lodgepole and limber pine areas simultaneously. The survey will have cost, when finished, approximately $335.00, and cover a period of 40 days time for 2 men.

If funds can be secured, a general clean-up on the whole bug infested areas should be made. Realizing the difficulty of securing funds for insect control projects, we have advised treatment on those areas which are most in need of treatment.

Following is a short write-up for each area, which we feel should receive treatment:

Tabby Mountain

Although an isolated unit, this area contains a high percentage of big over-mature timber, which will continue to be a potential host for new attacks. It will have to be treated as a separate unit, but should be done this fall, as there exists a peculiar situation which cannot be dealt with with snow on the ground. The new attacks in the big over-mature lodgepole pine show very few, if any, pitch tubes and can be detected only by the new sawdust around the base of the tree, but upon testing them, they show a heavy infestation.

Upper Soapstone Creek

This is an isolated area. However, it is in need of a cleaning up, as the infested trees are in groups in Section 29 particularly. This area has not been treated since the fall of 1934, but although it shows an endemic infestation, the beetles are still there and under favorable conditions may spread into an epidemic condition.

Soapstone Creek

This unit is quite a large solid body of lodgepole pine and although treated in the spring of 1935, still has quite a few heavy attacks. The north end of this area is particularly susceptible to new

attacks due to its close proximity to the heavily infested areas of the Wasatch. This condition calls for more frequent treatment than some of the other units.

Wolf Creek

This unit was our most heavily infested area treated last spring. It is a solid group of mostly over-mature lodgepole pine, inter-mixed with spruce-fir and aspen and the second worst area of infestation. The infested trees are grouped and attacked heavily.

Rhodes Canyon Drainage

The head of Rhodes Canyon has only few attacks and scattered. The upper part of this unit has a few heavy attacks, but more or less scattered. The lodgepole type is mostly over-mature and will remain a potential host for beetle infestation if treatment is not followed up.

Log Hollow - Nobletts Creek

Log Hollow is an area containing chiefly reproduction in the pole stage. Beetle infested trees have been found in the larger diameter trees, but not so prevalent as in the mature and over-mature stands of lodgepole pine. Nobletts Creek is made up chiefly of limber pine, inter-mixed with Douglas fir. The major part of the limber pine has been killed in earlier beetle attacks, but there still remains enough live limber pine that would justify treatment of the present infested trees.

Dry Hollow

This unit shows scattered attacks and not especially heavy, but the area is located next to the Wasatch Forest boundary and is made up of mostly over-mature timber. Heavy infestations have taken a large percentage of the over-mature trees in previous years and may mean a heavy re-infestation later if not treated this fall or next spring.

Nobletts (Iron Mine Creek)

This is an isolated group of lodgepole reproduction in the pole stage, was heavily infested last year among the larger diameter trees. Our present cruise shows a marked decrease in new attacks and may be

ignored in treating if funds are not available for a 100 percent treatment.

Mill Hollow

This unit is another group of lodgepole reproduction in the pole stage. No new attacks were found and very few dead trees were encountered in our 11.9 percent cruise of the area.

These nine units, if all are to be treated, will necessitate moving our camp to four different places to get the best results. The outer limits of several units are quite remote from each other and would necessitate long walks and hauls of oil and burning equipment.

Estimate of Funds Needed

We are basing our estimate of cost on figures taken from the actual cost of the 1935 spring and 1934 fall Uinta Forest insect control projects. The cost of supplies and equipment is somewhat the same, but we have some oil on hand.

The average for the 1934 fall and 1935 spring project costs was $2.07 per tree, inclusive of contributed time. We feel that for all units the cost per tree would not exceed $2.00 ~~per tree~~, and we are using this figure for each unit to be treated. Supplies, equipment and fuel oil can be transported by car, except for Tabby Mountain pack animals would have to take it up on top. We feel that the cost per tree figure will insure more accuracy in the estimate, as we have a fair idea of the number of trees to be treated in each unit, and from past projects are enabled to secure rather precise figures for cost-per-tree treatment.

Uinta Forest Insect Control,
Survey, 1935

Following is our estimate of funds needed for each unit:

| Unit | Acreage | Acreage in Strip Line | No.of N.A.'s On Line | No. N.A.'s in Unit | Cost Per Tree | Treating Cost Per Unit |
|---|---|---|---|---|---|---|
| Tabby Mountain | 1021 | 75 | 24 | 327 | $ 2 | $ 654 |
| Upper Soapstone Creek | 199 | 29 | 11 | 75 | 2 | 150 |
| Soapstone Creek | 1014 | 105 | 22 | 43 213 | 2 | 426 |
| Wolf Creek | 683 | 58 | 15 | 177 | 2 | 354 |
| Rhodes Cany. Drainage | 974 | 59 | 13 | 215 | 2 | 430 |
| Log Hollow-Nobletts Cr. | 448 | 42 | 6 | 64 | 2 | 128 |
| Dry Hollow | 528 | 44 | 6 | 72 | 2 | 144 |
| Nobletts (Iron Mine Cr.) | 178 | 20 | 1 | 9 | 2 | 18 |
| Mill Hollow | 109 | 13 | 0 | Possibly | | 0 |
| Totals ---------- | 5154 | 445 | 98 | 1152 | | $ 2304 |

The average percent of cruise for the above cruise is 8.6%, ~~25% decrease~~.

Corrected report, of that submitted by Valentine I. Bentley, Assistant to Technician.

Provo, Utah
October 21, 1935.

Chas. D. Morey Jr.
F.S.

UINTA FOREST INSECT CONTROL SURVEY, 1935

| UNIT | Acreage in Unit | Acreage in L.P. Strip Line | Strip Multi-plier | No. of N.A. on Strip | Estimated No. N.A. in 1935 | Estimated No. N.A. in 1934 | Plus or Minus Cruise in 1935 Plus | Minus | Percent Cruise | Acres Per N.A. | TIME TREATED | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tabby Mountain | 1021 | 75 | 13.61 | 24 | 327 | 452 | -- | 125 | 7.3 | 3.1 | Fall of 1934. | Isolated area. Decrease over 1934. Recommend treatment. |
| Upper Soapstone Creek | 199 | 29 | 6.86 | 11 | 75 | .86 | -- | 11 | 14.6 | 2.3 | " " " | Few heavy attacks. Decrease over 1934. Recommend treatment. |
| Soapstone Creek | 1014 | 105 | 9.66 | 22 | 213 | 290 | -- | 77 | 10.3 | 4.8 | Spring of 1935. | Few heavy attacks. General decline in infestation. Recommend treatment. |
| Wolf Creek | 683 | 58 | 11.78 | 15 | 177 | 187 | -- | 10 | 8.5 | 3.9 | Spring 1934 & 1935. Fall 1933 & 1934. | Mostly heavy attacks. Slight decline in infestation. Recommend treatment. |
| Rhodes Canyon Drainage | 974 | 59 | 16.51 | 13 | 215 | 249 | -- | 34 | 6.1 | 6.5 | Spring 1934 & 1935. Fall 1933 & 1934. | Few heavy attacks. General decline in infestation. Recommend treatment. |
| Log Hollow-Nobletts Creek | 448 | 42 | 10.67 | 6 | 64 | 106 | -- | 42 | 9.4 | 7 | Fall 1933 & 1934. Spring 1934. | Few heavy attacks. General decline in infestation. Recommend treatment. |
| Dry Hollow | 528 | 44 | 12.00 | 6 | 72 | 133 | -- | 61 | 8.3 | 7.3 | Fall 1934. Spring 1934. Fall 1933. | Weak attacks. Recommend treatment if funds are available. |
| Nobletts (Iron Mine Creek) | 178 | 20 | 8.9 | 1 | 9 | 27 | -- | 18 | 11.2 | 19.8 | Fall 1934. Spring 1934. Fall 1933. | Weak attacks. Recommend treatment if funds are available. |
| Mill Hollow | 109 | 13 | 8.38 | 0 | -- | 5 | -- | 5 | 11.9 | No N.A.'s | Fall 1934. | - - - - - - - - - - - - - - - - - - - - - - |
| | 5154 | 445 | -- | 98 | 1152 | 1535 | -- | 383 | 8.6 Av. | 4.5 Av. | | |